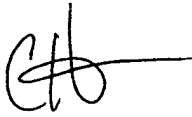


Case No.: AMANO-002A

TITLE OF THE INVENTION  
CODED RIBBON CARTRIDGE, DECODER, AND RIBBON INK CAPACITY  
INDICATOR WITH LCD DISPLAY

CROSS-REFERENCE TO RELATED APPLICATIONS

~~(Not Applicable)~~

 THIS APPLICATION IS A DIVISIONAL OF 10/171,721 FILED 6/14/02,  
NOW PATENT # 6,767,147.  
STATEMENT RE: FEDERALLY SPONSORED RESEARCH/DEVELOPMENT

(Not Applicable)

BACKGROUND OF THE INVENTION

[0001] Dot matrix printer assemblies utilize ribbon cartridges that contain continuous strip of material impregnated with an ink solution. The ribbon is contained in a cartridge container that normally mounts around the dot matrix printer's print head. As the ribbon passes between the printer head and a sheet of paper, information is then printed on to the sheet of paper.

[0002] In order to print the information, small rods or pins in the printer head are thrust into the ribbon, which then makes contact with the paper adjacent to the pins, thereby transferring ink from the ribbon to the paper. Through the proper combination of dots, the ink transferred is transformed into recognizable letters or symbols. The higher the impact force of the pins on the ribbon the darker the resulting image. Contemporary printers commonly produce a consistent impact force.

[0003] As the printer assembly moves across the sheet of paper, the ribbon formed as a continuous band, is also pulled laterally across the gap between the paper and the print head, continuously providing a new area to be struck